Annual Consumer Report on the Quality of Tap Water for 2009

Whiteman AFB, MO

This is an annual report on the quality of water delivered by Whiteman AFB. This report is intended to provide you with important information about your drinking water and the efforts made to provide safe drinking water. Users will not be mailed individual copies of this report.

Under the Consumer Confidence Reporting Rule of the federal Safe Drinking Water Act (SDWA), community water systems are required to report this water quality information to the consuming public. Presented in this report is information on the source of our water, its constituents, and the health risks associated with any contaminants.

We continually monitor the drinking water for contaminants. Our water is safe to drink.

Your drinking water comes from the Whiteman AFB Water Treatment Plant operated by 509th Civil Engineering Squadron. Our system has been assigned the identification number MO 1079501. The plant treats water from the Ozark Aquifer pumped from groundwater wells located on base. Your water is filtered and treated with chlorine to disinfect the water. These wells have been tested and the results are available from the 509th Medical Operations Squadron, Bioenvironmental Engineering Flight (687-4324). If you would like to observe the decision-making process that affects your drinking water quality or if you have any further questions, the water plant can be reached at 660-687-1984.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791). Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring, or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Department of Natural Resources prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Department of Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

For more information please contact Lt Kirk at the 509th Medical Operations Squadron, Bioenvironmental Engineering Flight (687-4324).

Table of Detected Contaminants

Microbial	Units	MCL	MCLG	Level Found	Detection Range	Violation	Sample Year
Total Coliform	# pos	≤ 5	0	0 positive	N/A	No	weekly
Sources		Natural bacteria present in the environment					
Fecal Coliform	# pos		0	0 positive	N/A	No	weekly
Sources		Naturally present in the environment					

Organic	Units	MCL	MCLG	RAA	Detection Range	Violation	Sample Year
Total Triha-lomethanes	ppb	80	0	10.3000	10.3	No	2007
Sources		By-product of drinking water chlorination					

Inorganic	Units	MCL	MCLG	Level Found	Detection Range	Violation	Sample Year
Barium	ppm	2	2	0.0219	0.0219	No	2008
Sources		Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits					
Fluoride	ppm	4	4	0.5200	0.52	No	2008
Sources		Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories					
Nitrate + Nitrite (ASN)	ppm	10	10	<0.05	<0.05	No	2008

Radionuclide	Units	MCL	MCLG	Level Found	Detection Range	Violation	Sample Year
Gross Alpha, Total	pCi/L	0	15	1.3000	1.3	No	2007
Sources		Erosion of natural deposits					

Combined Radium Level RA226 and RA228

Sample Year	Units	Combined Radium Detected	Detection Range	MCL	MCLG
2007	pCi/L	0.6	0.6	5	0

Copper

Collection Period	Units	Action Level	90th Percentile	Detection Range	Sites exceeding AL
2008-2010	ppm	AL=1.3	0.0891	0.00612—0.124	0
Sources	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives				

Lead

Collection Period	Units	Action Level	90th Percentile	Sites exceeding AL
2008-2010	ppb	AL=15	0.0000	0
Sources	Corrosion of household plumbing systems; Erosion of natural deposits			

Optional Contaminants

Inorganic	Units	Level Found	Detection Range	Sample Year	Violation
Alkalinity, CACO3 Stability	mg/L	147.0000	147	2008	No
Aluminum	mg/L	0.113	0.113	2008	No
Calcium	mg/L	19.5000	19.5	2008	No
Chloride	mg/L	29.8000	29.8	2008	No
Hardness, Total (AS CAC03)	mg/L	117.0000	117	2008	No
Iron	mg/L	< 5	< 5	2008	No
Magnesium	mg/L	16.5000	16.5	2008	No
pH	pH	8.3000	8.3	2008	No
Potassium	mg/L	3.9000	3.9	2008	No
Sodium	mg/L	32.1000	32.1	2008	No
Solids, Total Dissolved (TDS)	mg/L	222.0000	222	2008	No
Sulfate	mg/L	42.1000	42.1	2008	No
Volatile Organic	**Units**	**Level Found**	**Detection Range**	**Sample Year**	**Violation**
Bromodichloromethane	µg/L	< 0.5	< 0.5	2008	No
Bromoform	µg/L	0.85	0.85	2008	No
Dibromochloromethane	µg/L	0.58	0.58	2008	No

Definitions:
MCLG: Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety, **MCL:** Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology, **AL:** Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow, **TT:** Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water, **90th percentile:** For lead and copper testing. 10% of test results are above this level and 90% are below this level, **Level Found:** is the average of all test results for a particular contaminant, **Range of Detections:** Shows the lowest and highest levels found during a testing period, if only one sample was taken, then this number equals the Level Found, **RAA:** Running Annual Average, or the average of sample analytical results for samples taken during the previous four calendar quarters.
Abbreviations:
PPB: parts per billion or micrograms per liter, **PPM:** parts per million or milligrams per liter, **n/a:** not applicable, **MFL:** million fibers per liter, used to measure asbestos concentration, **nd:** not detectable at testing limits